

PROJECT 10073 RECORD CARD

1. DATE 18 Mar 59		2. LOCATION Caldwell, New Jersey		12. CONCLUSIONS <input type="checkbox"/> Was Balloon <input type="checkbox"/> Probably Balloon <input type="checkbox"/> Possibly Balloon <input type="checkbox"/> Was Aircraft <input checked="" type="checkbox"/> Probably Aircraft <input type="checkbox"/> Possibly Aircraft <input type="checkbox"/> Was Astronomical <input type="checkbox"/> Probably Astronomical <input type="checkbox"/> Possibly Astronomical <input type="checkbox"/> Other _____ <input type="checkbox"/> Insufficient Data for Evaluation <input type="checkbox"/> Unknown	
3. DATE-TIME GROUP Local _____ GMT 19/0140Z		4. TYPE OF OBSERVATION <input type="checkbox"/> Ground-Visual <input type="checkbox"/> Ground-Radar <input type="checkbox"/> Air-Visual <input type="checkbox"/> Air-Intercept Radar			
5. PHOTOS <input type="checkbox"/> Yes <input type="checkbox"/> No		6. SOURCE Civilian			
7. LENGTH OF OBSERVATION 50 secs		8. NUMBER OF OBJECTS 2		9. COURSE varied	
10. BRIEF SUMMARY OF SIGHTING 2 objs covered 90° arc in sky in 50 secs. Objs appeared to be rnd w/dull reddish glow. Maintained same relative position in northerly flight. No sound associated w/objs. As distance increased objs dimmed and then lights on objs became more brilliant becoming similar to landing lights on an a/c.				11. COMMENTS ATIC conclusion is that the witness probably saw a/c lights.	

The possibility of static in the camera or on the film was considered but set aside because of the peculiar layout of the white spots, and because no other instance of static of any type showed up in this film or other similar series of shots taken with the same equipment under identical conditions. The film was not old nor, as well as can be determined, defective. It should be noted that the line of streaks is not interconnected and does not follow parallel to the length of the roll, but curves markedly to the film's edge.

Mr. Munsick studied the film and a series of prints, all enlarged greatly, in an effort to identify the objects. They are clearly not refractory "ghosts" of the moon itself, as they bear no similarity whatever to the moon or any round object. Mr. Munsick's interest comes in part from his background as an investigator, editor, and lecturer on the subject of Unidentified Flying Objects. Neither he nor a colleague, Hans Stefan Santesson, editor of Fantastic Universe Magazine, a science-fiction publication, could offer any explanation. Mr. Santesson is interested in Unidentified Flying Objects and is familiar with the background in the field. Neither of the two had ever seen nor heard of anything similar to this photograph before.

Mr. Munsick contacted the photographic adviser to UFO Newsletter and Fulcrum Productions, Steve Elfenbein of Morristown; a professional photographer with extensive photoreportorial experience plus industrial photographic knowledge. He was unable to offer any explanation for the objects, but also ruled out the possibility of static in such conformation.

Mr. Elfenbein is a test photographer with the Reaction Motors Division of Thiokol Industries in Rockaway, N. J., recording tests of rocket engines on static runs (currently testing their rocket motor for the X-15 experimental "space-plane"). He suggested that the diamond-like shapes were reminiscent of the repeating pattern in rocket exhausts, but said the line was too irregular, too long, and did not generally conform to rocket exhausts. It was determined that Reaction Motors was doing no testing near the time of the photograph.

Mr. Munsick contacted the adjutant of Picatinny Arsenal, the huge U. S. Army Ordnance Corps installation outside of Dover, N. J., northwest of Denville. The members of the Arsenal Photo Lab studied the photograph and could reach no conclusion about possible causes, either photographic, nor in line with projects at or near the Arsenal's sprawling test area.

The Arsenal was asked if there was any Army experimental device or project which might offer a solution; was it possible some sort of rocket had been sent high above the earth from Cape Canaveral with a stroboscopic tracking light?

Colonel Albert J. Winnig, Commander of the Arsenal, replied:

"I have discussed this photograph with several knowledgeable people who are acquainted with tracking flashes and missile firing.

"There does not appear to be a rational explanation for the flashes on the photograph. The line of sight from Denville in the direction of the moon would lead to a point somewhat west of Cape Canaveral. However, there were no known missile firings at the time the photograph was taken. Further, if a missile were fired it would have to be at an altitude of approximately 3500 miles above Florida to be along the line of sight from Denville to the moon.

"One explanation is that there was an accidental double exposure with one of the exposures catching a line of lights either from cars on the road or electric bulbs along a road.

"I am sorry but frankly we are at a loss to provide a unique explanation."

The nature of the images and their layout on the photograph excludes the line of lights on moving automobiles on a nearby road

(U.S. Route 46, major east-west artery from New York City to the Delaware Water Gap, runs nearby) even if a double exposure were a satisfactory answer.

Mr. Munsick undertook a study of high intensity street lighting devices which line Denville's main street, Broadway. The 25 foot tall supports hold very bright lights indeed, but full caps atop the lamps forestall a direct beam of light going up from the fixture. The conformation of the lamps along the street does not fit in with the photographic layout; the number of images likewise does not coincide with the number of streetlights. The lights are not visible from the point where the telescope rested; they are somewhat to the east of the line of sight to the moon.

James S. Pickering, Assistant Astronomer at the Hayden Planetarium - Museum of Natural History in New York City was asked for his comment. Mr. Pickering was at a loss to give any explanation for the phenomenon seen in the photograph, but suggested that a static explosion in Mr. Wilson's camera was the cause. He added his firm belief that there was nothing "up there" to cause the image in the photograph.

The photographs were submitted to the photography department of LOOK Magazine in New York; again no explanation whatever was forthcoming, only the comment that the photo was certainly unique.

A visit to LIFE Magazine's offices, however, prompted somewhat more active interest. William J. Sumits, Chief of the Photographic Laboratory, requested permission to undertake additional study of the photographs and the film, which was granted with Mr. Wilson, Mr. Munsick, Mr. Sumits' assistant George Karas, and others present. Extremely high magnification of one portion of the negative (which resulted in an area enlargement from the original view of well over 2,000 times) indicated the V shaped bursts of light were partially penetrated by mysterious black bars running on each side of the images parallel to the line of objects. In some of the objects, these two black bars formed what look like black pincers closing in on the wider part of the V of light, as though on pivots at the narrower portion.

Mr. Sumits strongly ruled out the possibility of any type of static, after comparison with LIFE's files on all kinds of photographic static. He offered his conviction that the photograph was of an actual object somewhere above the earth, speeding at tremendous velocity, and apparently reflecting or emitting an intermittent light. He suggested further investigation and suggested contacting the various agencies conducting space and missile research.

Miss Ruth Lester, of LIFE's Picture Bureau, requested an enlarged print of the original photograph, along with the initial report on the case submitted 29 April 1959 by Mr. Munsick. She also asked to be kept informed of the result, if any, of more intensive future investigations.

Jonathan Leonard, Science Editor of TIME Magazine, expressed a complete skepticism about the validity of the photograph, insisting that the cause must lay somewhere in the camera or telescope; but he repeated he hadn't the faintest idea of the real explanation. He made it quite clear he was totally disinterested in any such photos.

Mr. Munsick discussed the photograph with Prof. Ralph Van Arnam, astronomer and member of the Mathematics Faculty of Lehigh University in Bethlehem, Pennsylvania. Professor Van Arnam expressed surprise at the photograph and, like the others contacted, said he had never seen anything like it before. He said he doubted very much that the picture was of any normal celestial object, but felt the photograph was a true recording of something other than a photographic or optical phenomenon within the equipment. He, too, asked further information about any future results.

Two theories have been advanced about the flight of the would-be objects. One holds that the images represented two lines of objects, the left-hand group arcing in toward earth and spiraling slightly, thus explaining the slight up-and-down deviation in the arc; and the right-hand group angling in nearly a straight line downward and away from the camera.

The second is similar, holding that if the photograph is actually a true recording of 34 objects, the left-hand group appeared to be coming toward the camera in an arc while the right-hand group was doing the same but with a more obtuse path and further away.

Considering the possibility of a temperature inversion (although the extreme clarity of the objects, their regularity and brightness, would seem to preclude this answer), the U. S. Weather Bureau was asked for information about the conditions aloft during the period in which the photograph was taken (the photograph was not mentioned).

Mr. L. L. Means, Chief of the Public and Agricultural Forecasts Section of the Weather Bureau, U. S. Department of Commerce, replied from Washington:

"...we are enclosing a graph of the atmosphere from a sounding taken at Idlewild, New York, approximately 7:00 p.m. E.S.T. March 18. Although there were no temperature inversions present, there were two layers of isothermal character in the lower levels. There did exist an inversion at the tropopause level near 38,000 feet and it is reasonable to assume that similar conditions existed over Denville, New Jersey...

"The weather observations taken at Newark Airport between 8:31 p.m. and 9:54 p.m. inclusive show generally overcast at approximately 12,000 feet with less than 5/10 cloud cover at 6,000 feet. The surface visibility was 15 miles with winds from the east about 10 knots.

"Our radiosonde balloons released around 7:00 p.m. would not be lighted as they are followed by radar procedures. With winds generally from the west the Idlewild equipment would have blown out to sea and it is unlikely that it would have been visible by you. The radiosondes released at Buffalo and Pittsburgh could hardly have reached your area until near midnight, if indeed they stayed aloft that long."

Enclosed is additional data and computations which give estimates of the area and possible speed of the objects when experimental estimates of the distance from the telescope are given. In the table and calculations, the "A-B Length" is the straight-line distance perpendicular to the line of sight, between the extreme outside objects in the arc, and does not attempt to take into consideration the arc length itself, nor any three-dimensional qualities.

ABOUT THE MOON

The first quarter for March occurred the night before the exposure was made, or 17 March 1959.

Figures for Apogee and Perigee for the month of March (indicating the distances at the farthest and closest) according to Sky and Telescope Magazine, are as follows:

Date	GMT	EST	Distance in Miles	Diameter
Apogee 14	9a	4a	251,800	29' 29"
Perigee 26	9a	4a	224,100	33' 08"

COMPUTATIONS OF LINEAL AREA AND SPEED OF OBJECTS (DISTANCES SUPPLIED)

If the distance is estimated to be: Then the A-B length is: The speed at 1/25 sec.* exposure is:

4.8 feet	.045 feet	.77 MPH
9.5 feet	.091 feet	1.55 MPH
19 feet	.181 feet	3.09 MPH
38 feet	.363 feet	6.19 MPH
76 feet	.725 feet	12.4 MPH
152.5 feet	1.5 feet	25 MPH
305 feet	2.9 feet	50 MPH
610 feet	5.8 feet	99 MPH
1200 feet	11.6 feet	198 MPH
$\frac{1}{2}$ mile	23.2 feet	396 MPH
1 mile	46 feet	** 792 MPH
5 miles	231.8 feet	3,960 MPH
10 miles	463.6 feet	7,920 MPH
25 miles	1159 feet	19,800 MPH
50 miles	2318 feet	39,600 MPH
100 miles	4636 feet	79,200 MPH
500 miles	4.4 miles	396,000 MPH
1000 miles	8.8 miles	792,000 MPH
5000 miles	44 miles	3,960,000 MPH
10,000 miles	88 miles	7,920,000 MPH
50,000 miles	440 miles	39,600,000 MPH
100,000 miles	880 miles	79,200,000 MPH
229,350 miles #	2000 miles	180,000,000 MPH

*Assuming one object rather than more up to 34.

**From one mile distant and up speeds are supersonic.

#This is the distance of the moon.

To be moving at or near the speed of light the objects would have to be about 7 billion million miles away, and span a distance of over 60 million million miles in 1/25th sec.

PERTINENT DATA ON COMPUTATIONS

The diameter of the moon is 2,160 miles. The approximate distance of the moon at the time of the exposure was 229,350 miles (courtesy of Hayden Planetarium). The apparent diameter of the moon is calculated to be .54 degrees, or 34'. The size of the A-B line (see p. 4) is calculated to be .50 degrees by comparison with the moon image, or 2,000 miles.

If the object or objects are revolving to produce the sporadic image (assuming one continuous path) they are revolving at an average rate of 51,000 RPM. There being two facets reflecting the rate is halved, three, the rate is 17,000 RPM, if four 12,750 RPM, etc.

UFO Dept
The 1006th Air Intelligence Sq.
Air Technical Intelligence Center
Dayton, Ohio

[REDACTED]
Caldwell, N. J.
April 12, 1959

Subject: UFO Sighting 3/18/59

Gentlemen:

The writer and other undersigned persons witnessed UFO activity over Caldwell, N. J. as described below 3/18/59. See attached sketch of path of objects in the sky.

1. Objects were sighted at 8:40 PM EST on 3/18/59. Period was 50 sec. During this time objects covered approx. 90 degrees arc in sky overhead. Sky was cloudless with about 2/3 moon.
2. At position A, the two objects appeared round and had a dull reddish glow. The objects maintained the same relative position shown as they traversed a straight northerly path overhead. At point A they stood out clearly against a star studded moonlit sky. There was no sound that could be associated with these objects.
3. At position B these objects still appeared round but did not glow as much.
4. Between position B & C the shape of the objects could no longer be seen against the darker sky but what appeared to be reflected light (similar to that seen from Russian rocket casing) grew more and more intense. Finally, as objects went behind some trees they both were giving off a brilliant white light similar in intensity to the landing light of an aircraft during landing approach.

The writer is presenting this information as a matter of record for you, and as a matter of interest for himself and the undersigned observers. The writer is a graduate aeronautical engineer and has worked at NASA, Lockheed and Curtiss Wright in flight test and aircraft performance since 1942. He is therefore reasonably qualified to distinguish usual and unusual flying objects.

It would be greatly appreciated if you could give any information that might indicate what these objects were. Please contact the writer at the above address.

Very truly yours,

/s/ [REDACTED] writer
/s/ [REDACTED] Observer
/s/ [REDACTED] Observer

C
O
P
Y

COVER SHEET

SUSPENSE

ORIGIN OF BASIC

DATE

ASSIGNED BY

DATE

TYPE

NUMBER

SUBJECT

Sighting by Mr. [REDACTED]

ROUTING

Initial "IN" column to denote review prior to action. Initial "OUT" column to denote review of completed action. (X for action; ✓ for coordination.)

IN	OFFICE	OUT	IN	OFFICE	OUT	IN	OFFICE	OUT	IN	OFFICE	OUT
	OIN-1			OIN-2			OIN-3			AFOIN	
	OIN-1X			OIN-2X			OIN-3X			AFOIN	
										AFOIN-X	
										AFOIN-X	
										OIN-X1	
										OIN-X2	
										OIN-X3	
										OIN-X4	
										OIN-X5	
										CABLES	
										FILE	
										DISPATCH	

TO:

SAFIS-3, ATTN: Maj. L. J. Tacker

DATE

29 April 1959

FROM:

AFCIN-4E

COMMENT NUMBER

1

COMMENTS (Use reverse, if necessary)

4E4g/Maj Friend/ac/69216/Blag 263

1. The possibility of Mr. [REDACTED] seeing one of the satellites and its carrier was considered. Upon checking, it was determined no known satellites were in the area at time of sighting.

2. Assuming the figure of two degrees per second and 50,000 feet altitude, the speed would be around 600 knots, which is within the speed range of jet aircraft. It is quite possible the objects were at a lower altitude than 50,000 feet; however, a small error in the witnesses' estimate of time would have a large effect upon the resultant speed.

3. The AFIC conclusion is that in all probability the witnesses saw aircraft lights.

1 Incl:
Cy ltr dtd
12 Apr 59
fr [REDACTED]

H. K. Gilbert
H. K. GILBERT
Colonel, USAF
AFCIN-4E

18 APR 59

19/01402

29 May 1959

Dear Mr. [REDACTED]

This is to acknowledge and thank you for your letter of 12 April 1959 concerning an unidentified flying object sighting at Caldwell, New Jersey on 18 March 1959.

Assuming the figure of two degrees per second and 50,000 feet altitude, the speed of the object would be approximately 600 knots, which is within the speed range of current jet aircraft.


The Air Technical Intelligence Center conclusion is that in all probability you witnessed aircraft lights.

Sincerely,

LAWRENCE J. TACKER
Major, USAF
Executive Officer
Public Information Division
Office of Information Services

Mr. [REDACTED]

Caldwell, New Jersey


Morristown, N. J., U. S. A.

RADIO AND TELEVISION PROGRAMMING
MUNSICK MUSIC LIBRARY
U. F. O. NEWSLETTER
PUBLIC RELATIONS

32
23 May 1959

Commanding Officer
Air Technical Intelligence Center
United States Air Force
Wright-Patterson Air Force Base
Dayton, Ohio


Dear Sir,

We are investigating the enclosed photograph which was taken in nearby Denville, N. J., the night of 18 March 1959.

Although we have entered many avenues to obtain some kind of conclusion, as yet we seem no closer to any substantial result than when we started except for a large file of data. I would very much appreciate it if you could look into the matter, and, if possible, give us the results of your study.

Any help you can give us in reaching a solution to the puzzle would be appreciated. If I can be of any further assistance please feel free to call on me either by mail or telephone at Jefferson 8-6995.

I look forward with great interest to your reply.

Sincerely yours,


Encls.

[REDACTED]
[REDACTED]
Morristown, N. J., U. S. A.

RADIO AND TELEVISION PROGRAMMING
MUNSICK MUSIC LIBRARY
U. F. O. NEWSLETTER
PUBLIC RELATIONS

12 June 1959

Commanding Officer
Air Technical Intelligence Center
United States Air Force
Wright-Patterson Air Force Base
Dayton, Ohio

Dear Sir,

On 23 May I sent to your office a photograph and report involving strange objects apparently between Denville, New Jersey and the moon on the night of 18 March 1959.

As yet I have received neither an acknowledgement nor reply in this case. While I certainly appreciate such evaluation would take time, I would appreciate it if you could inform me if the material was received at your office.

Should you require further information please let me know. If you did not receive the information I shall send a new copy.

Sincerely yours,
[REDACTED]
[REDACTED]
[REDACTED]



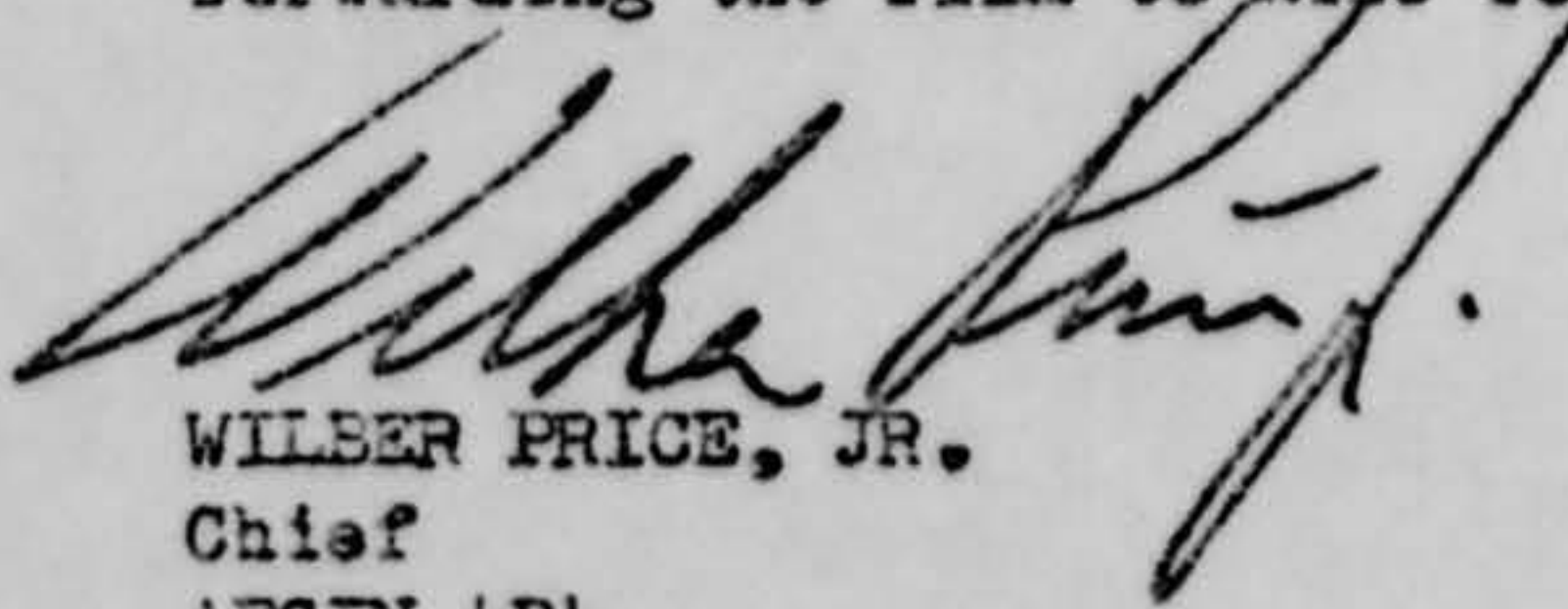
AIR TECHNICAL INTELLIGENCE CENTER
UNITED STATES AIR FORCE
WRIGHT-PATTERSON AIR FORCE BASE
OHIO

19 Jun 59

REPLY TO
ATTN OF: AFCIN-4D4a/Mr. Davis/74295
SUBJECT: "Moon Objects"

TO: AFCIN-4E4
Attn: Maj. Friend

1. The photograph you submitted for analysis was scrutinized for an explanation of the 34 "moon objects" that appear in the immediate area of the moon. The history of the photograph and its prior analysis was studied and found to be quite interesting. The "moon objects" indeed appear to be images rather than scratches, spots, dustmarks, etc. The quality of the photograph is good and reflects the work of a professional type photographer.
2. Before this office can offer an explanation for the "moon objects" it will be necessary to acquire the original negative, preferably together with the remainder of the roll film.
3. Should you desire further analysis of the photography, it is suggested that contact be made with Mr. [REDACTED] requesting his forwarding the film to ATIC for further analysis.


WILBER PRICE, JR.
Chief
AFCIN-4D4

2 Atchs
1. Report
2. Photograph

18 JUL 59

2 July 1959

Dear Mr. [REDACTED]

Your letter of 12 June 1959 concerning photograph you submitted to Air Technical Intelligence Center has been referred to this office for reply.

Subject photograph was received at the Center and it is presently in the process of being analyzed.

Sincerely,

LAWRENCE J. TACKER
Major, USAF
Executive Officer
Public Information Division
Office of Information Services

Mr. [REDACTED]
[REDACTED]
[REDACTED]

Morristown, New Jersey

At approximately 8:50 p.m. EST, Wednesday 18 March 1959, Jesse Wilson of 8 Myers Avenue, Denville, N. J., took the first of a series of photographs of the moon through a 3 $\frac{1}{4}$ " refractor telescope. Mr. Wilson has been interested in amateur astronomy for some years, and has built several telescopes himself, including the one he was using that night. He has taken literally hundreds of pictures of the moon, both as a hobby and as a means of checking his equipment. The lunar studies have been acclaimed as exceptionally fine by many photographers and astronomers.

Jesse Wilson is a professional photographer and laboratory technician. He makes his living by taking pictures for local newspapers, insurance and real-estate offices, industrial concerns and the like, and by processing photographs for local photo stores.

He has made a habit of taking a telescope to his back yard on good nights, to photograph the moon. On this evening, he had a group of neighbors on hand to look at the moon in the cool, crisp evening air, which offered excellent "viewing." Afterward, he set up the equipment to take his photographs, and proceeded to take a dozen pictures. They were all taken with a Super Ikonto "B" Camera with an f 2.8 lens set at infinity on Tri-X film, shutter setting 1/25th sec. The telescope is approximately 38 power, 48 inch focal length. At about 8:50 the moon was approximately 48° above the horizon, roughly SSE from the viewing position.

Mr. Wilson aligned his telescope and camera, snapped the first photo (the one in question), recocked his camera (with a crank, thus making it virtually impossible to get a double exposure; the cranking resets the shutter after the film has been moved to its next position), reset the telescope to compensate for the earth's movement, and took the next photo. The process takes probably no more than 30 seconds at the most.

When Mr. Wilson developed the roll of film with type DK60A developer he noticed a streak of odd spots on the first exposure. When a print was made, they proved to be 34 fish-tail like objects in an arcing line, apparently rushing away from the moon. The "tails" all aim into the southwest quadrant but are not all pointing in the exact same direction.

The images generally fall into two groups; the left-hand one of 13 objects larger, apparently closer to the camera, and farther apart. The right-hand group of 21 more closely spaced, smaller, and more evenly distributed in almost a straight line.

The moon is not quite in focus and it has been assumed that the telescope was focused just short of the moon. Although it is difficult to tell, the images of the strange objects seem to be in near-perfect focus. Because of the short-exposure no stars or other objects are in sight although the moon itself is clearly pictured.

No other exposures on the same roll of film show any peculiarities, and Mr. Wilson says he has never before captured any such odd objects on film with the same equipment. They were not seen visually.

Mr. Wilson showed the film to Robert W. Dunn of Lake Parsippany, N. J., a photo technician and amateur astronomer who notified Mr. Munsick in Morristown. The camera and telescope were both checked for light leaks or odd reflections; none were found. The telescope has a large dew-cap to overcome reflections and outside light. The photos are taken with the camera lens held against the eyepiece of the telescope.

The film was rigorously studied under magnification. The images are clearly that and not imperfections, dust-spots, scratches, or other irregularities on the film itself.